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Commonwealth of Massachusetts

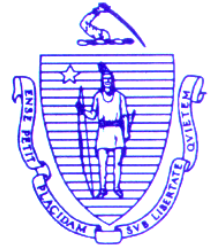
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December 9, 2005

Stephen R. Pritchard
Secretary, Executive Office of Environmental Affairs
Attn: MEPA Office, Rick Bourre
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: EOE #13061, Weaver's Cove Energy LNG Import Terminal Project Second Supplemental Final Environmental Impact Report

Dear Secretary Pritchard:

The Division of Marine Fisheries (*MarineFisheries*) has reviewed the Second Supplemental Draft Environmental Impact Report (SSDEIR) for Weaver's Cove Energy, LLC and Mill River Pipeline LLC to construct an LNG import terminal, associated pipelines and to conduct necessary dredging of the Massachusetts portion of the existing Federal Channel and Turning Basin located in the lower Taunton River and Mount Hope Bay, with respect to potential impacts to marine fisheries resources. We offer the following comments and recommendations for your consideration.

It is well established and documented that Mount Hope Bay and the Taunton River provide valuable habitat for a diverse assemblage of finfish and invertebrates. Winter flounder and many diadromous fish species use all or part of the Taunton River for passage, spawning, nursery, and forage habitat, in turn providing forage for other predatory species and helping to support important recreational fisheries. Various life stages of numerous other finfish species transit and/or inhabit the river during the year. In addition, the extremely productive shellfish habitat and resources found within and adjacent to the proposed project footprint have been characterized by *MarineFisheries* as "Significant Shellfish Habitat" and the largest horseshoe crab spawning beach on the Massachusetts' side of Mount Hope Bay is located in the Taunton River upstream of the proposed facility.

Regarding potential impacts to marine fisheries habitat and resources, the SSDEIR provides no relevant data or support for the applicant's general premise that this project will have only short-term and negligible impacts to the environment. Much of the material contained within the SSDEIR was presented in previous documents and contained numerous unsupported conclusions, faulty and/or missing analyses, and invalid assumptions; this material has already been determined to be inadequate for the task at hand.

The following issues continue to be of great concern to *MarineFisheries*:

- In the absence of supplemental data and spatially and/or temporally relevant research, estimates of the range and magnitude of potential negative impacts to finfish and shellfish presented in the SSDEIR cannot help but underestimate these effects. The analytical models used for this purpose may be conservative in their representation of environmental sensitivity; however, it is doubtful that dated and limited information used to drive them can accurately portray conditions within this river system.

- We note that the SSDEIR describes the project area as containing *potential* shellfish habitat, despite evidence to the contrary from the agency charged with management of this resource. *Marine Fisheries*' estuarine study of the Taunton River and Mount Hope Bay (Curley et al., 1974), the 1985 stock assessment of Mount Hope Bay and the Taunton River, and the 2002 *Marine Fisheries* Shellfish Habitat maps all document the valuable shellfish habitat found within and around the project area. Substantial quantities of quahogs are found in the river and bay, and the cove on the south side of the proposed facility contains significant quantities of American oysters. Assertions that the value of these habitat areas is somehow diminished because shellfish in the river are not available for direct human consumption are irrelevant. Prior to the spread of diseases such as MSX in 1985, oysters were relayed from the project site. The Commonwealth has used the Taunton River as a source of quahogs for the contaminated relay and transplant program from 1907 to the present. In all cases, individuals of these species provide forage for other species and serve as brood-stock for downstream areas in Massachusetts and Rhode Island. Because of the ongoing relay program, pre-dredge abundance surveys are not necessarily indicative of habitat value and a one-time shellfish seeding effort cannot address the direct loss of habitat caused by dredging or the continuing impacts that are likely to result from deep-draft vessel passage through the river.
- The SSDEIR fails to acknowledge the need for TOY restrictions to protect shellfish spawning. These periods are:
 - Mid-June through mid-September for American oyster spawning (may occur twice per year);
 - Mid-June through mid-September for quahog spawning (may occur twice per year); and
 - May through October for soft-shell-clam spawning (may occur twice per year).
- The loss or alteration of winter flounder spawning and juvenile settlement habitat in the Taunton River and Mount Hope Bay is not addressed in a meaningful way in the SSDEIR. The Southern New England/Mid Atlantic (SNE/MA) winter flounder stock is considered to be depleted by the Atlantic States Marine Fisheries Commission (ASMFC). Current spring estimates of relative abundance for most year-classes are less than one-half of the 24-year average. Recent estimates (2004), place the SNE/MA stock at 13% of the fishery management plan's (FMP) biomass target level (S. Correia, personal communication). The Taunton River and Mount Hope Bay are classified as Essential Fish Habitat (EFH) by the New England Fisheries Management Council (NEFMC) and ASMFC classifies spawning areas such as these as Habitat Areas of Particular Concern (HAPCs). In accord with this designation, the ASMFC Winter Flounder FMP recommends establishment of strict timeframes during which sediment dredge activities should be prohibited in spawning and nursery areas. Given the diminished status of this stock and documented impacts to successful reproduction that can result from increased sedimentation (e.g. decreased spawning success and increased incubation periods), a risk averse approach should be required (i.e. a January 15 – May 31 TOY restriction recommended by the State and Federal fisheries agencies). Discussions regarding appropriate compensatory mitigation in the event that this project moves forward must take into consideration that fact that the common practice of applying out-of-kind/out-of-place mitigation such as salt marsh restoration do not address habitat loss and, when viewed on a larger scale, may in fact constitute an unsupportable cumulative loss of habitat.
- The SSDEIR continues to dismiss discussions of impacts to the many diadromous species that move through the area. In addition to alewife, blueback herring, American shad, and rainbow smelt, species such as sturgeon, American eel, white perch, hickory shad, tomcod, and lamprey all spawn and/or live in the Taunton River. Division biologists emphasize the need for risk averse management to protect these species.
- As a result of region-wide declines in population levels, *Marine Fisheries* recently placed a three-year ban on the harvest of river herring (blueback and alewife). These species spawn in seventeen tributaries of the Taunton River north of the Weaver's Cove site and many of these runs are declining or nearly depleted. In consideration of this severe closure action, appropriate

TOY limits are required to protect these herring enroute to their spawning grounds, without which river herring population decline may be exacerbated.

- The SSDEIR failed to note that blueback herring and alewife runs occur in the same tributaries, but do not spawn at the same time; with blueback spawning in the Taunton River following after alewife spawning. Also, there is a major blueback herring spawning run located in Assonet Bay just north of Weaver's Cove.
- The SSDEIR lists a *Marine Fisheries*' report as a reference for the Nemasket River alewife spawning season, but fails to note that the Nemasket River is approximately thirty miles upstream of the Weaver's Cove site. Because of the distance between the Nemasket River and Weaver's Cove, herring remain in the Taunton River and migrate downstream over a prolonged period.
- *Marine Fisheries* strongly disagrees with the SSDEIR recommendation for a March 15 start date for a rainbow smelt TOY. *Marine Fisheries*' Technical Series Report #5 (Chase and Childs, 2002) studied smelt in the Fore River in Weymouth and based upon three years of observations, recommends a smelt TOY beginning in mid February or March 1st at the latest.
- Appropriate TOY windows for diadromous species of concern would be as follows:
 - Inward migration
 - Alewife - mid-March through mid-June
 - Atlantic sturgeon - April through June
 - Blueback herring – mid-April through July
 - Rainbow smelt - March 1 through mid-May
 - White perch – mid-February through May
 - American eel/Elver (juveniles) inward migration - March through June
 - Outward migration
 - Alewife – mid-June through September
 - Atlantic sturgeon - June through November
 - Blueback herring - September through early November
- As previously noted, the largest horseshoe crab spawning beach on the Massachusetts' portion of Mount Hope Bay is located approximately a mile north of the Weaver's Cove site. Crabs migrate to spawning beaches in May and remain through June. Spawning generally occurs on night tides with crabs remaining offshore or in channel areas during the day. In order to protect this regulated species, no activity which may impede crab migration in the river should occur from May through June.
- The SSDEIR does not contain any meaningful discussion of actions to minimize and/or mitigate for the impacts likely to result by the regular passage of the deep draft LNG tankers and support vessels through the embayment. In describing the action of the propellers used on the tractor tugs, the SSDEIR fails to note that due to the position of the cycloid propeller under the tug, the force is directed downward toward the sediment. Additionally, citation of the Boston Harbor study of LNG tanker passage over the CAD cells fails to acknowledge several critical differences between the two areas and situations that render comparison of the two nearly meaningless:
 - General depth in the area of CAD cell is 60' and the top of cover in the cell is some number of feet below that depth;
 - Proposed depth in the Taunton River is 37';
 - Cover material on top of the CAD cell is sand from the Capd Cod Canal with relatively little fine grain material;
 - Sediments found in the area of Weaver's Cove are a mixture of sand, mud, and silt;
 - Purpose of the passage study in Boston Harbor was to determine the likelihood of erosion of the cap and cell edge due to passage of the tanker above. Only two instruments were placed on the bottom along the route, both in CAD cells and no attempt was made to measure the disturbance along other parts of the route where depths and sediments types might better approximate those found in the Weaver's Cove area.

- As in previous documents, the SSDEIR rejects consideration of the use of horizontal directional drilling (HDD) for use in the Taunton River based on speculation regarding existing sediment types and does not reflect the state-of-the-art. Considerably more flexibility and range in the use of this technique have been demonstrated during construction of the HubLine gas pipeline and other projects throughout Massachusetts. Concern over release of drilling muds is inappropriate as techniques exist to contain this material and smaller barges than those depicted can be used to perform this work. It is unfortunate that no effort was made to obtain accurate information regarding sediment types along the pipeline route.
- The SSDEIR does not adequately address potential impacts from withdrawal of millions of gallons of river water for ballast and hydrostatic testing other than a brief accounting of potential impingement/entrainment mortality and a comparison to other sources. The SSDEIR notes that while billions of fish eggs and larvae will be destroyed in ballast tanks and hydrostatic testing, the number of fish that would have lived to maturity was minimal. The SSDEIR fails to discuss the importance of these billions of fish eggs, larvae, and juveniles to the food web and their importance to the fish, birds, and animals in the Taunton River/Mount Hope Bay ecosystem. The cumulative impact of 50 to 70 annual withdrawals of as much as 14-million gallons of water needs should have been discussed within the context of other similar activities within the embayment and with due consideration of the greater impact such activity may have during periods of drought or seasonal low water.
- As required by the Secretary's Certificate, *Marine Fisheries*' request for a more comprehensive discussion of the contribution that dredging and vessel operations associated with the Weaver's Cove project will make to the overall cumulative impacts imposed upon the marine fisheries resources and habitats in the project area have not been addressed. As in previous documents, the SSDEIR does nothing more than provide a list of some of the many sources of impact to this embayment and fails to incorporate the additional impacts that may be caused by this new activity.

The SSFEIR has been prepared as an attempt to address numerous and serious deficiencies noted in the SFEIR and other submissions. Regrettably, little or no attempt is made to correct this precedent in the SSDEIR. Accordingly, *Marine Fisheries* considers the failure to address these avoidable impacts a violation of the regulations governing NEPA, MEPA, and CZM Federal Consistency and recommends that the SSDEIR be deemed inadequate.

Questions regarding this review may be directed to Vin Malkoski in our New Bedford office at 508-910-6318.

Sincerely,



Paul J. Diodati
Director

Cc: Representative David B. Sullivan
Mayor Edward Lambert, City of Fall River
David Swearingen, FERC
Brian Valiton, USACE
Theodore Barton, Epsilon Associates
Tim Timmerman & Eric Nelson, US EPA
Chris Boelke, NMFS
John Felix, DEP
Truman Henson & David Janik, MCZM
Hickey, Whittaker, Sawyer, & Brady, MDMF